

WHAT IS CLAIMED IS:

5 7  
A3

1. An electronic component including, on electrodes, a plurality of connection materials connected to another electronic component, said connection materials including a composite connection material formed of a core and a conductor covering said core, said core having a low modulus of elasticity at room temperature smaller than a low modulus of elasticity of said conductor at room temperature, and a single-layer connection material formed of a conductor.

5  
5

2. The electronic component according to claim 1, wherein said composite connection material is placed on an electrode among electrodes arranged in an electrode region of said electronic component, said electrode being located in an area where a relatively greater stress is likely to be exerted than a stress exerted on another area of the electrode region, and said single-layer connection material is placed on an electrode in said another area.

5  
5

3. The electronic component according to claim 1, wherein said composite connection material is placed on an electrode among electrodes arranged in an electrode region of said electronic component, said electrode being located in a corner area, and said single-layer connection material is placed on an electrode located in an area other than said corner area.

4. The electronic component according to claim 1, wherein the ratio in number of said composite connection material to all connection materials is from 10 % to 90 %.

5. The electronic component according to claim 3, wherein the ratio in number of said composite connection material to all connection materials is from 10 % to 90 %.

6. A method of mounting a semiconductor device on a substrate, said semiconductor device including, on an electrode, a composite connection material formed of a core and a conductor covering said core, said method comprising the steps of:

5 forming an auxiliary connection part in contact with the upper side of an electrode of said substrate, said auxiliary connection part being formed of a low melting-point conductor having a melting point of at most a melting point of said conductor covering said core; and

Sub 1A 47  
10 matching respective positions of said auxiliary connection part and said composite connection material to bring into contact said auxiliary connection part and said composite connection material, and heating to connect said auxiliary connection part and said composite connection material.

7. The method of mounting a semiconductor device according to claim 6, wherein

said auxiliary connection part on the electrode of said substrate is greater in volume than said conductor of said composite connection material on the electrode of said semiconductor device.

8. A mounting structure for mounting a semiconductor device, that is connected to a substrate via a plurality of connection materials, wherein

said plurality of connection materials are constituted of a first type of connection material formed of a core and a conductor covering said core and a second type of connection material formed of a conductor.

9. A mounting structure for mounting a semiconductor device, that is connected to a substrate via a composite connection material formed of a core and a conductor covering said core, wherein

Sub 1A 5  
5 said composite connection material has a substrate contact portion contacting said substrate and an electrode contact portion contacting an electrode of said semiconductor device, and melting point of said substrate contact portion is lower than that of said electrode contact portion.